Correspondence

Physical Diagnosis and the Nonexpert Physician

To the Editor: Dr Fitzgerald's review of the literature contrasting the role of physical diagnosis with modern technology in the April 1990 issue¹ is an important contribution to all physicians. What was particularly valuable was how physical findings were placed in a clinical framework of patient or disease outcome. This pragmatic approach to the place of physical diagnosis in the repertoire of physicians is quite useful.

A concern arises when "expert" clinicians are used as the "gold standard." In the review, ophthalmoscopy done by a skilled examiner was more accurate than tonometry in detecting glaucoma. A qualified pediatric cardiologist's assessment of heart disease was not improved by echocardiography, electrocardiography, or chest roentgenography. Finally, the accuracy of the clinical cardiologist's prediction of left ventricular ejection fraction using physical findings was excellent. Most general internists strive to attain physical diagnosis skills at a level comparable to these "expert" clinicians. The lack of acceptance of the general internist's or, for that fact, any nonexpert's examination, as the standard of measurement is disconcerting. The most useful comparison of technology versus physical diagnosis would show how the typical physician—expert and nonexpert compares with a given test or procedure.

The paradox of the expert is at its height with the physical examination. I have already used this review to demonstrate to medical students and house officers the clinical value of different aspects of physical diagnosis. Can I be sure that the data can be extrapolated to this group who needs it most? Most physicians are not considered "experts" on every part of the physical examination; what is the role of technology in replacing that lack of expertise?

Dr Fitzgerald's review should be a stimulus for all physicians to continually improve physical diagnosis skills. It also can provide a framework for future investigation into the usefulness of the many tools available to clinicians, one of which is the physical examination. I hope future studies will recognize the nonexpert and relatively inexperienced physician as the population who would benefit the most from the results.

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Allergy Screening Tests

To the Editor: The article by Imam and colleagues, reporting on a simple allergy screening test in the March issue, raises several important questions that may challenge the validity of the conclusions drawn.

What is the basis for the implied assertion that a positive intradermal test following a negative skin prick test is a measure of specific immunoglobulin E (IgE), the stated basis for atopy? At least two reports attempting to correlate single-dose intradermal allergy tests and provocation challenges suggest that such positive results are clinically irrelevant.^{2,3}

No figures are given on the number of patients judged to be atopic on clinical grounds and subjected to skin testing who were negative. Wouldn't the selection of skin test-positive individuals for in vitro testing skew the results in favor of skin testing being more sensitive? One must assume that not all patients given skin tests in an allergist's office are positive. Might not some of these patients have shown positive results by in vitro testing?

Because 34% of the individual skin test-negative results were positive by the screening test, doesn't this suggest a high level of false-positivity in the screening test? And would this not carry over to affect all the screening test positive results? This may explain the difference between the screening test and the radioallergosorbent test.

Since most allergists conduct skin testing over two or more office visits and all in vitro tests are done overnight after a single blood specimen is drawn, is skin testing really more timely?

A recent study commissioned by the Health Industry Manufacturers Association shows that in vitro tests in the hands of nonallergists are less expensive than skin testing by allergists. The cost of in vitro specific IgE tests has dropped considerably over the past few years. The reference given for the statement that skin tests are more economical is dated 1981.

Skin testing is at best an indirect measure of specific IgE. It is affected by many factors that are difficult to control in an outpatient setting, such as medications previously taken by the patient, diurnal variation in test results, dermatographism, and crosstalk among skin tests. None of these affect the results of in vitro serologic determinations of specific IgE antibody, a direct measure of IgE. A study from Denmark reported at the Berlin meetings of the European Academy of Allergy and Clinical Immunology compares skin testings, in vitro testing (MAST), and bronchial provocation testing (BPT). Correlations of MAST results and BPT were 93%, while skin tests' correlation was 77%. This hardly supports the "benchmark" designation for allergy skin testing.

The concluding statement in the data analysis section on the ideal referral of all screening test-positive patients to an allergist would seem to be so self-serving as to question the objectivity of the investigators.

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- Reddy PM, Nagaya H, Pascual HC, et al: Reappraisal of intracutaneous tests in the diagnosis of reagenic allergy. J Allergy Clin Immunol 1977; 61:36-41
- 4. Øslergaard PA, Nielsen JP: Comparison of bronchial provocation test with CLA, RAST and skin prick test in children with asthma caused by specific allergens (Abstract). 14th Congress of the European Academy of Allergology and Clinical Immunology, Berlin (West), Sep 17-22, 1989

Dr Novey Responds

To THE EDITOR: In questioning the validity of the intradermal diagnostic test, Dr Marinkovich confuses detection of IgE antibodies with clinical relevance. No test for IgE antibodies directly measures clinical disease. The intradermal method, however, is more sensitive and reproducible but less specific than either the scratch or prick techniques, and